

IN THE CLAIMS:

Please cancel Claims 1-43, without prejudice to or disclaimer of the subject matter recited therein. Please add new Claims 44-63, as follows.

44. (New) An optical material which is formed by mixing materials comprising a first material having a refractive index of not more than 1.45 for the d-line and a second material having an Abbe number, indicating wavelength dispersion in the visible region, of not more than 25, wherein with a predetermined ratio of mixture of said first material and second material, a relation between a refractive index for the d-line (n_d) and an Abbe number (v_d) is defined as follows:

$$n_d \leq -6.667 \times 10^{-3} v_d + 1.70.$$

45. (New) The optical material according to Claim 44, wherein the Abbe number (v_d), indicating wavelength dispersion in the visible region, is less than 40.

46. (New) An optical material^N which is formed by mixing materials comprising a first material having a refractive index of not more than 1.40 for the d-line and a second material having an Abbe number, indicating wavelength dispersion in the visible region, of not more than 15, wherein with a predetermined ratio of mixture of said first material and second material, a relation between a refractive index for the d-line (n_d) and an Abbe number (v_d) is defined as follows:

$$n_d \leq -6.667 \times 10^{-3} v_d + 1.70.$$

47. (New) The optical material according to Claim 46, wherein the Abbe number (v_d), indicating wavelength dispersion in the visible region, is less than 40.

48. (New) An optical material which is formed by mixing materials comprising a first material having a refractive index of not more than 1.45, and not more than 1.55 for the d-line, and a second material having an Abbe number, indicating wavelength dispersion in the visible region, of not more than 10, wherein with a predetermined ratio of mixture of said first material and second material, a relation between a refractive index for the d-line (n_d) and an Abbe number (v_d) is defined as follows:

$$n_d \leq -6.667 \times 10^{-3} v_d + 1.70.$$

49. (New) The optical material according to Claim 48, wherein the Abbe number (v_d), indicating wavelength dispersion in the visible region, is less than 40.

50. (New) An optical member formed by an optical material which is formed by mixing materials comprising a first material having a refractive index of not more than 1.45 for the d-line and a second material having an Abbe number, indicating wavelength dispersion in the visible region, of not more than 25, wherein with a predetermined ratio of mixture of said first material and second material, a relation between a refractive index for the d-line (n_d) and an Abbe number (v_d) is defined as follows:

$$n_d \leq -6.667 \times 10^{-3} v_d + 1.70.$$

51. (New) The optical material according to Claim 50, wherein the Abbe number (v_d), indicating wavelength dispersion in the visible region, is less than 40.

52. (New) The optical member according to Claim 50, wherein said second material comprises particles having a grain size in the range of 2 to 100 nm.

53. (New) The optical member according to Claim 50, wherein said first material is an amorphous fluororesin.

54. (New) The optical member according to Claim 50, wherein said second material is particles of a composite metal oxide of titanium and silicon ($\text{Si}_x\text{-Ti}_{(1-x)}\text{O}_2$) having the Abbe number (v_d) of 24.4.

55. (New) The optical member according to Claim 50, wherein said first material is an amorphous fluororesin, said second material is particles of a composite metal oxide of titanium and silicon ($\text{Si}_x\text{-Ti}_{(1-x)}\text{O}_2$) having the Abbe number (v_d) of 24.4, and a weight ratio of the particles and said amorphous fluororesin is in the range of 45:100 to 75:100.

56. (New) The optical member according to Claim 50, wherein said first material is a dimethylsilicone resin.

57. (New) The optical member according to Claim 50, wherein said first material comprises particles of titanium oxide (TiO₂).

58. (New) The optical member according to Claim 50, wherein said first material is a dimethylsilicone resin, said second material is particles of titanium oxide (TiO₂), and a weight ratio of the titanium oxide and said dimethylsilicone resin is in the range of 18:100 to 70:100.

59. (New) An optical system comprising the optical member according to Claim 50.

60. (New) An optical device comprising the optical system according to Claim 59.

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61. (New) A diffracting optical element formed by an optical material which is formed by mixing materials comprising a first material having a refractive index of not more than 1.45 for the d-line and a second material having an Abbe number, indicating wavelength dispersion in the visible region, of not more than 25, wherein with a predetermined ratio of mixture of said first material and second material, a relation between a refractive index for the d-line (n_d) and an Abbe number (v_d) is defined as follows:

$$n_d \leq -6.667 \times 10^{-3} v_d + 1.70.$$

62. (New) An optical system comprising the diffracting optical element according to Claim 61.

63. (New) An optical device comprising the optical system according to Claim 62.